



Product designation			Power contactor
Product type designation			BF80
Contact characteristics			
Number of poles		nr.	3
Rated insulation voltage Ui		V	1000
Rated impulse withstand voltage Uimp		kV	8
Operating frequency			•
	Operational frequency min	Hz	25
	Operational frequency max	Hz	400
Conventional free air thermal current Ith		A	115
Operating current		Λ	110
Operating current	Operational current AC1 (≤40°C)	А	115
	Operational current AC3 (≤440V ≤55°C)	A	80
	Operational current AC3 (5440V 555 C) Operational current AC4 (400V)	A	38
Rated operational power AC1 (T≤40°C)	Operational current AC4 (400V)	A	30
	230V	kW	43
	400V	kW	43 76
	400V 500V	kW	95
Dated aparational new or AC2 (T <e5°c)< td=""><td>690V</td><td>kW</td><td>120</td></e5°c)<>	690V	kW	120
Rated operational power AC3 (T≤55°C)	000)/	1.3.47	00
	230V	kW	22
	400V	kW	45
	415V	kW	45
	440V	kW	45
	500V	kW	55
	690V	kW	55
	1000V	kW	37
Short-time allowable current for 10s (IEC/EN6	60947-1)	A	640
Protection fuse			
	gG (IEC)	A	125
	aM (IEC)	A	80
Making capacity (RMS value)		A	800
Breaking capacity at voltage			
	Breaking capacity 440V	А	640
	Breaking capacity 500V	А	625
	Breaking capacity 690V	Α	456
Resistance per pole (average value)		mΩ	0.6
Power dissipation per pole (average value)			
	Power dissipation pole (average value) Ith	W	7.9
	AC3	W	3.8
Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	lbft	2.95
			0.00

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lbft

max

3.69



Tightening torque for coil terminal

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rightening torque for t				
		min	Nm	0.8
		max	Nm	1
		min	lbft	0.8
		max	lbft	0.74
max number of wires s	simultaneously connectable		nr.	2
Conductor section				
	AWG			
		min		14
		max		2
	Flexible w/o lug conductor section			
		min	mm²	1.5
		max	mm²	35
	Flexible c/w lug conductor section			
		min	mm²	1.5
		max	mm²	35
Power terminal protec	tion according to IEC/EN 60529			IP20 front
Auxiliary contact chara	acteristics			
Operational current AC	C1 (≤40°C)		А	115
Operating current DC1	13			
		4401/	^	Screw / DIN rail
		110V	A	35mm
Ambient conditions				
Temperature				
	Operating temperature			
		min	°C	-40
		max	°C	70
	Storage temperature			
		min	°C	-50
		max	°C	80
Max altitude			m	3000
Operating position				
		normal		Vertical plan
		allowable		±30°
Mounting				Screw / DIN rail
Mounting				35mm
Weight			g	1.06
Operations				
Mechanical life			Cycles	15000000
Electrical life			Cycles	1300000
Safety related data				
Performance level B1	0d according to EN/ISO 13489-1			
		rated load	Cicli	1300000
		mechanical load	Cicli	15000000
Mirror contats according	ng to IEC/EN 609474-4-1			yes
EMC compatibility	-			yes
AC coil operating				-
AC operating voltage				
, , , , , , , , , , , , , , , , , , , ,	of 50/60Hz coil powered at 50Hz			
	pick-up			
	L alb	min	%Us	0.8
);;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	

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max

%Us

1.1

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			max	%Us	≤0.75 Us min
	of 50/60Hz coil pow	ered at 60Hz			
		pick-up			
			min	%Us	0.8
			max	%Us	1.1
		drop-out			
			max	%Us	0.75
AC operating voltage					
	of 50/60Hz coil pow	ered at 50Hz			
			in-rush	VA	40130
			holding	VA	1.34.4
	of 50/60Hz coil pow	ered at 60Hz			
			in-rush	VA	40130
<u> </u>			holding	VA	1.34.4
Dissipation at holding	≤20°C 50Hz			W	12.5
DC coil operating	~~				
DC rated control voltage	ge			V	20
			min	V	20
DC operating voltage					
	pick-up			%Us	0.0
			min	%Us %Us	0.8 1.10
	drop out		max	7005	1.10
	drop-out		min	%Us	0.2
			max	%Us	0.55
Average coil consuption	ວກ <20°ີີີີ.		max	/000	0.00
	511 - 20 0		in-rush	W	60125
			IIIIUSII	vv	00120
			holding	W	17 23
Max cycles frequency			holding	W	1.72.3
Max cycles frequency Mechanical operations					
Mechanical operations				W Cycles/h	
	3				
Mechanical operations Operating times	3				
Mechanical operations Operating times	ontrol	Closing NO			
Mechanical operations Operating times	ontrol	Closing NO			
Mechanical operations Operating times	ontrol	Closing NO		Cycles/h	n 1500
Mechanical operations Operating times	ontrol	Closing NO Opening NO	min	Cycles/h ms	1500 12 28
Mechanical operations Operating times	ontrol	-	min	Cycles/h ms	1500 12 28 8
Mechanical operations Operating times	ontrol in AC	-	min max	Cycles/h ms ms	1500 12 28
Mechanical operations Operating times	ontrol	Opening NO	min max min	Cycles/h ms ms ms	1500 12 28 8
Mechanical operations Operating times	ontrol in AC	-	min max min max	Cycles/h ms ms ms ms	1500 12 28 8 22
Mechanical operations Operating times	ontrol in AC	Opening NO	min max min max min	Cycles/h ms ms ms ms	12 28 8 22 40
Mechanical operations Operating times	ontrol in AC	Opening NO Closing NO	min max min max	Cycles/h ms ms ms ms	1500 12 28 8 22
Mechanical operations Operating times	ontrol in AC	Opening NO	min max min max min max	Cycles/h ms ms ms ms ms	12 28 8 22 40 85
Mechanical operations Operating times	ontrol in AC	Opening NO Closing NO	min max min max min max min	Cycles/h ms ms ms ms ms ms	12 28 8 22 40 85 20
Mechanical operations Operating times Average time for Us c	ontrol in AC	Opening NO Closing NO	min max min max min max	Cycles/h ms ms ms ms ms	12 28 8 22 40 85
Mechanical operations Operating times Average time for Us co Vultechnical data	ontrol in AC in DC	Opening NO Closing NO Opening NO	min max min max min max min	Cycles/h ms ms ms ms ms ms	12 28 8 22 40 85 20
Mechanical operations Operating times Average time for Us c	ontrol in AC in DC	Opening NO Closing NO Opening NO	min max min max min max min max	Cycles/h ms ms ms ms ms ms ms	12 28 8 22 40 85 20 55
Mechanical operations Operating times Average time for Us co Vultechnical data	ontrol in AC in DC	Opening NO Closing NO Opening NO	min max min max min max min max at 480V	Cycles/h ms ms ms ms ms ms ms ms	12 28 8 22 40 85 20 55 77
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC in DC	Opening NO Closing NO Opening NO	min max min max min max min max	Cycles/h ms ms ms ms ms ms ms	12 28 8 22 40 85 20 55
Mechanical operations Operating times Average time for Us co Vultechnical data	ontrol in AC in DC	Opening NO Closing NO Opening NO	min max min max min max min max at 480V	Cycles/h ms ms ms ms ms ms ms ms	12 28 8 22 40 85 20 55 77
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC in DC	Opening NO Closing NO Opening NO	min max min max min max min max at 480V at 600V	Cycles/h ms ms ms ms ms ms ms a A A	12 28 8 22 40 85 20 55 77 77 77
Mechanical operations Operating times Average time for Us co UL technical data Full-load current (FLA)	ontrol in AC in DC	Opening NO Closing NO Opening NO	min max min max min max min max at 480V	Cycles/h ms ms ms ms ms ms ms ms	12 28 8 22 40 85 20 55 77

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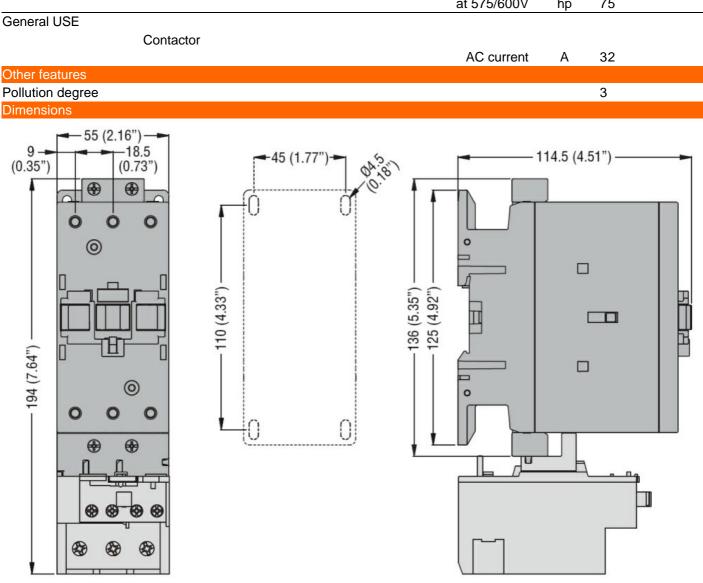
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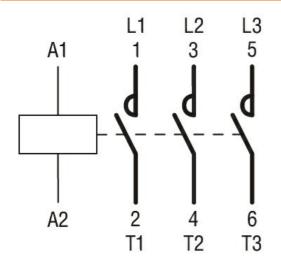
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at 460/480V 60 hp at 575/600V 75 hp Contactor AC current 32 А 3



Wiring diagrams



Certifications and compliance

Certifications

CSA C22.2 n° 60947-1

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CSA C22.2 n° 60947-4-1	
IEC/EN 60947-1	
IEC/EN 60947-4-1	
UL 60947-1	
UL 60947-4-1	

Compliance

cULus

ETIM 6 classification

EC000066 - Power contactor, AC switching

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